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Health Benefits Are Associated With Employment Status For People With Intellectual Disabilities

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Abstract

Recent studies demonstrate that people with developmental disabilities are at increased risk for preventable illnesses⁴. In our study, we examined several variables suspected to be major contributing factors, with emphasis on job security and employment. The development of sheltered workshops was initially an attempt to promote employment opportunities for people with intellectual and developmental disabilities (IDD), though at subminimum wages.

We explored whether these workshops allow for adequate community and healthcare engagement that is necessary for overall health and wellbeing. We designed a study that allowed us to statistically compare health-related data among states that eliminated sheltered workshops with those continuing this practice. These results were compared with internally available data (N=79) at Champlain Community Services (CCS), a specialized employment organization in Vermont serving people with IDD. We quantified health outcomes based on Medicaid standards which include annual wellness visits with a PCP, annual dental visits, and ensuring individuals are up to date on vaccinations. Additionally, we quantified other predictors for general wellbeing including current smoking status and body mass index (BMI).

The results of our study indicated that people with IDD from states that have eliminated sheltered workshops tend to have better health outcomes with notable exemplary outcomes in consumers involved with CCS.

We anticipate the results of this study will assist organizations, such as CCS, by articulating the impact of sheltered workshops on people living with IDD and receiving subminimum wage.

Introduction

- There are 10.1 million adults in the United States with an intellectual or developmental disability (IDD)¹
- In 2013, only 44% of adults with ID were in the labor force¹
- The unemployment rate for adults with ID vs without ID (21% vs 8%)¹
- Many states utilize sheltered workshops - supervised workplaces that employ persons with IDD for subminimum wages- \$3.35/hour²
- Champlain Community Services (CCS) is a non-profit specialized services agency in Vermont which provides community-based employment services to nearly 125 people³
- CCS closed their sheltered workshops in 2002 for a community-based, adult employment program, Way2Work, offering community-based job opportunities for people with IDD
- Employment has been linked to improved mental health outcomes in adults with IDD as well as the general population⁴

Way2Work's mission is to assist people with intellectual disabilities and autism find paid employment that is meaningful to them, valuable to their employer, and inclusive in the community.

- CCS data was compared to states such as Virginia, slow to discontinue sheltered workshops, Maine, similar demographics to Vermont (non-sheltered), and Hawaii, of sociopolitical similarity (non-sheltered)⁵
- Parameters: current engagement with primary care, annual dental visits, body mass index (BMI), and smoking status

The intent of our study is to identify the benefits of community-based, employment assistance programs like CCS, highlight the success of health and wellbeing of consumers involved in this program, and further establish credibility of CCS within the medical community as a helpful conduit for health improvement in people with IDD.

Results

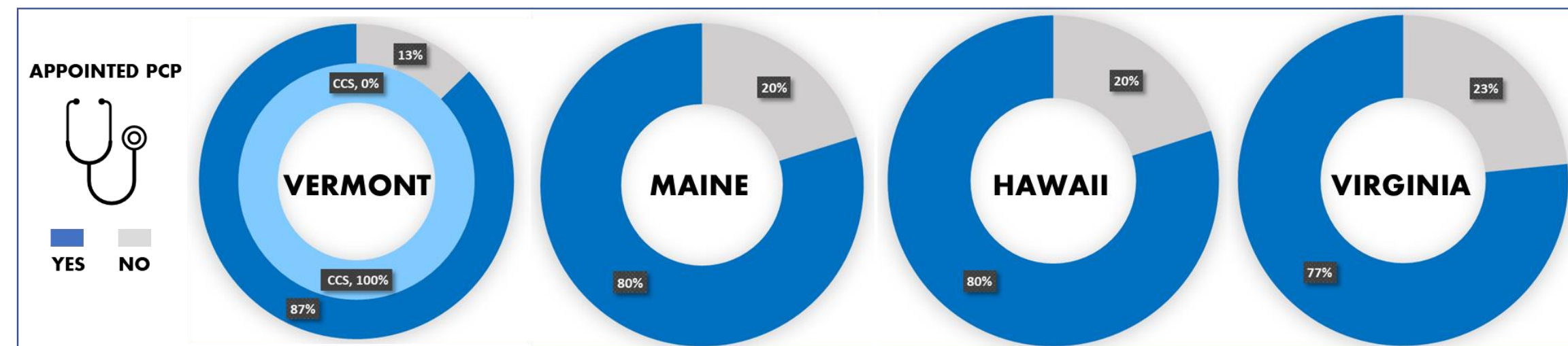


Fig 1. Annual percentage of people with IDD who have a primary care physician (PCP). Annual percentage for consumers in CCS for 2020 and CDC data for people with disabilities in 2018. When analyzing whether individuals have a PCP, CCS performed the highest with 100% of consumers having a PCP compared to VT as a whole (87.3%), ME (79.8%), VA (76.6%), HI (79.9%)

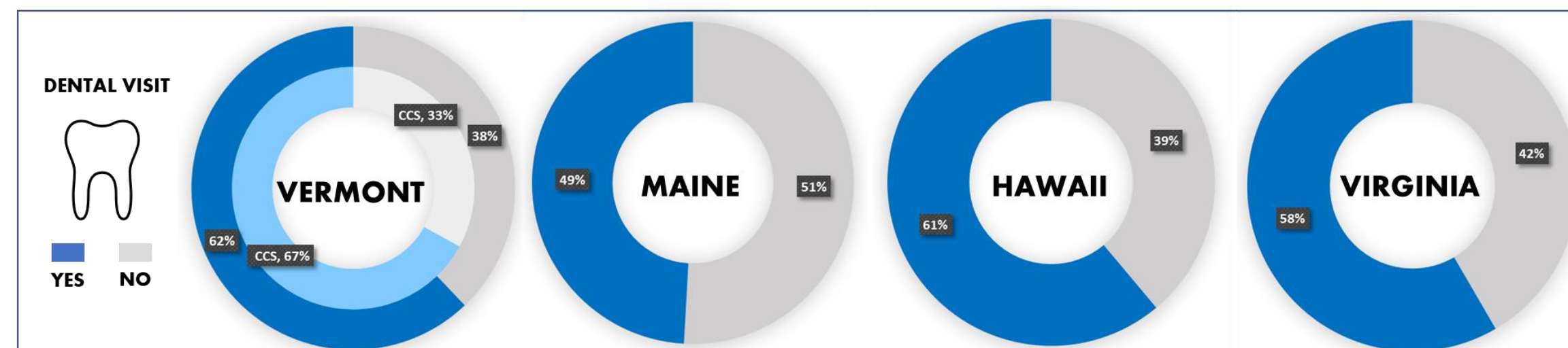


Fig 2. Annual percentage of people with IDD who sought at least one dental cleaning. Annual percentage for consumers in CCS for 2020 and CDC data for people with disabilities in 2018. When analyzing dental visits, CCS had the highest percentage of the population that had a dental visit within the last year (67%) compared to VT as a whole (62.1%), ME (49.1%), VA (58.4%), HI (61.1%)

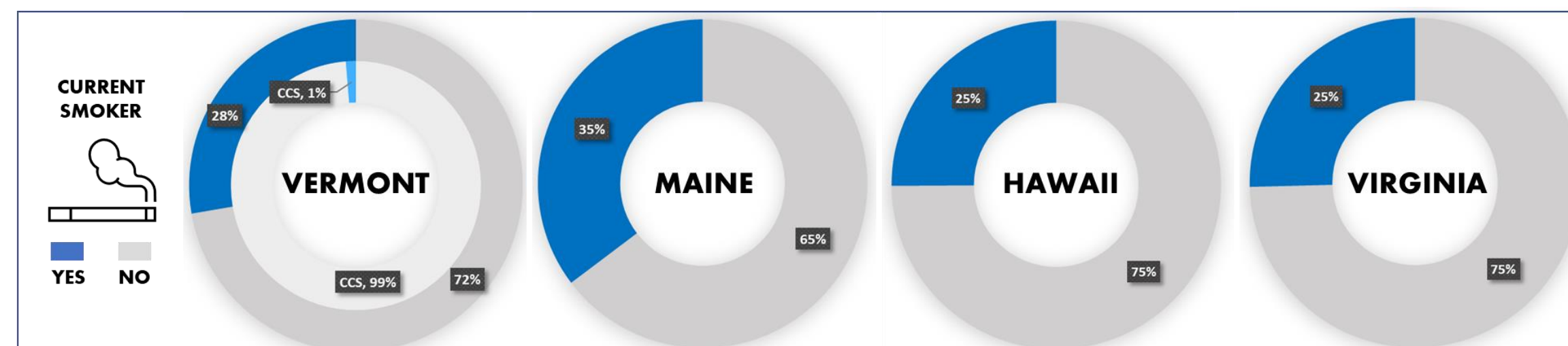


Fig 3. Annual percentage of people with IDD who are current tobacco smokers. Annual percentage for consumers in CCS for 2020 and CDC data for people with disabilities in 2018. When analyzing smoking status, CCS had the highest percentage of non-smokers (98.7%), compared to VT as a whole (72.3%), ME (64.7%), VA (74.6%), HI (74.9%)

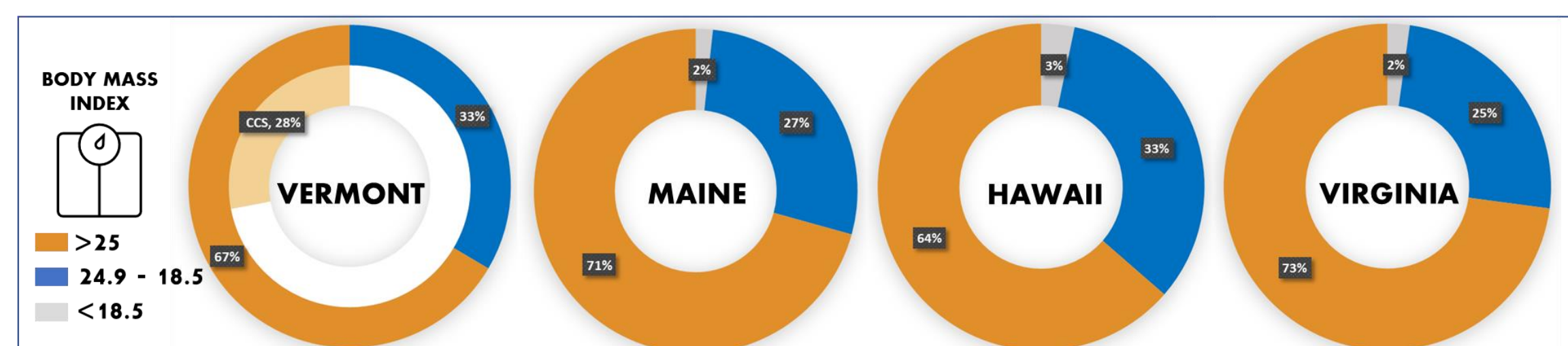


Fig 4. Annual percentage of people with IDD within certain BMI ranges. Annual percentage for consumers in CCS for 2020 and CDC data for people with disabilities in 2018. When analyzing weight, CCS had the lowest percentage of individuals being overweight or obese (28%) compared to VT as a whole (66.5%), ME (70.7%), VA (72.9%), HI (63.6%)

Methods

CDC Comparison Statistics

Disability and Health Data System (DHDS) available through CDC as an open-source for state-level data on adults with disabilities.^{6,7} States were selected for the criteria: Virginia - sheltered workshop control. Maine, Hawaii, Vermont - without sheltered workshops. We matched respondent questions asked through the database's survey, Behavioral Risk Surveillance System, with data from the same category as collected through CCS internal consumer profiles.

CCS Internal Analysis

CCS provided deidentified data points from 79 consumer health records to address categories of interest. Data is presented as percentages over the total available as accessible via Electronic Health Record (EHR). Figures were generated in Excel.

Discussion

- CCS is unique via securing community-integrated employment for its consumers with health engagement
- CCS consistently had higher engagement with healthcare and less comorbidities among its consumers in contrast to other compared states
- Adoption of an employment-focused model such as CCS' in other states could lead to better health engagement and outcomes for individuals with intellectual disabilities
- This is a human-rights issue, as the sheltered workshop model is exploitative and does not provide tangible benefits to workers in the way that placement and integration with regular employment does.
- Limitations to the study:
 - CCS data was compiled in 2020 vs CDC data in 2018 (highlights possible differences due to COVID-19).
 - Exclusive use of descriptive data rather than primary statistical analyses

We hope that by presenting this data that healthcare professionals, especially Primary Care Physicians, will take note of the impact of programs such as CCS on individual health outcomes. This will in turn lead to increased referrals from PCPs with patients who have IDD to CCS, thus improving community health amongst a vulnerable population.

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